

#### APPLICATIONS:

The Heathkit Isolation Transformer will fulfill a multitude of requirements. Not only will it provide isolation for AC-DC type radios, it will also provide a means for increasing or decreasing the AC voltage applied to the radio. Intermittent conditions can often be detected in this way. It is possible that many other applications of the Isolation Transformer will suggest themselves to the user, like using it to isolate interference-radiating devices from the AC line.

## HEATHKIT VARIABLE VOLTAGE



MODEL IT-1

**\$16.50**  
\$1.65 DOWN  
\$1.39 MO.

SHPG. WT. 9 LBS.

# Isolation Transformer KIT

## FEATURES

- ▶ Voltage control and 0 to 150 VAC meter on front panel.
- ▶ Rated for 100 voltamperes continuously or 200 voltamperes intermittently.

The Heathkit Model IT-1 is one of the handiest units for the service shop, home workshop or laboratory. The advantages of an isolation transformer such as this are three-fold.

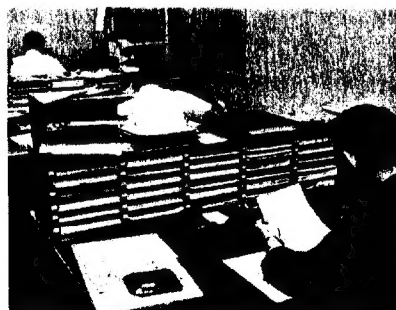
Complete isolation from the power line is provided since there is no direct connection between the primary of the transformer and the secondary. AC-DC sets may be plugged directly into the IT-1 without the chassis becoming "hot". Since the IT-1 is fused, it is ideal for use as a buffer between the power line and a questionable receiver or a new piece of equipment that has never been operated before.

- ▶ Output variable from 90 to 130 VAC.
- ▶ Fused for protection, and for isolation of untested equipment from the power line.

Protects house fuses or main fuses in shop. Thirdly, the voltage control of the Isolation Transformer allows control of the output voltage from 90 volts to 130 volts so that the customer's line voltage may be duplicated to see how the set operates under adverse conditions.

Not to be confused with the usual hazardous "auto-transformer" type of line voltage "booster". The output voltage is monitored by an easy-to-read panel meter. Transformer is fused at 2 amperes (slow blow) in the primary circuit and is rated at 100 voltamperes continuously, or up to 200 voltamperes intermittently.

## HEATH CONSULTATION SERVICE...



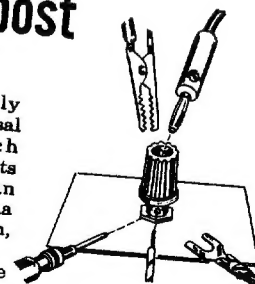
The photograph above shows a Heath Engineering Consultant answering a customer's letter. This extra service is your assurance of successful kit construction, and is one of the reasons why there is such a great difference between just any kit—and a Heathkit!

One of the "extras" you get when purchasing a Heathkit is the availability of our consultation service. Should you experience some sort of difficulty in constructing or operating your kit you can write to Heath Company for help. Although only a very small percentage of our customers ever have occasion to use this service (usually only beginners in electronics) it is still reassuring to know that technical help is available when needed. Our trained Engineering Consultants are specialists in their field and are thoroughly familiar with all Heathkit models and the applications to which they are suited.

IT-1 in 1953-1955 Catalogs  
IS-1 Similar

## HEATHKIT binding post KIT...

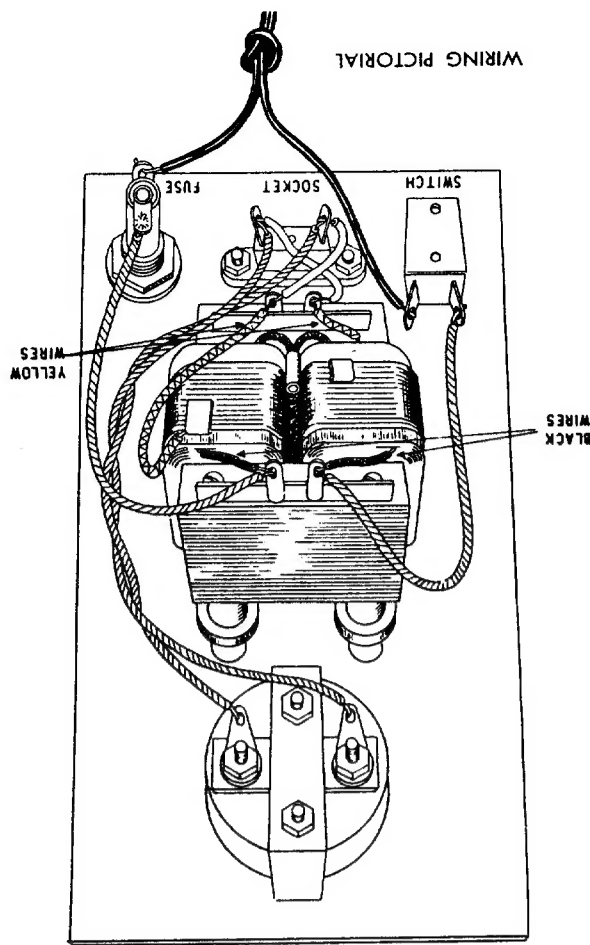
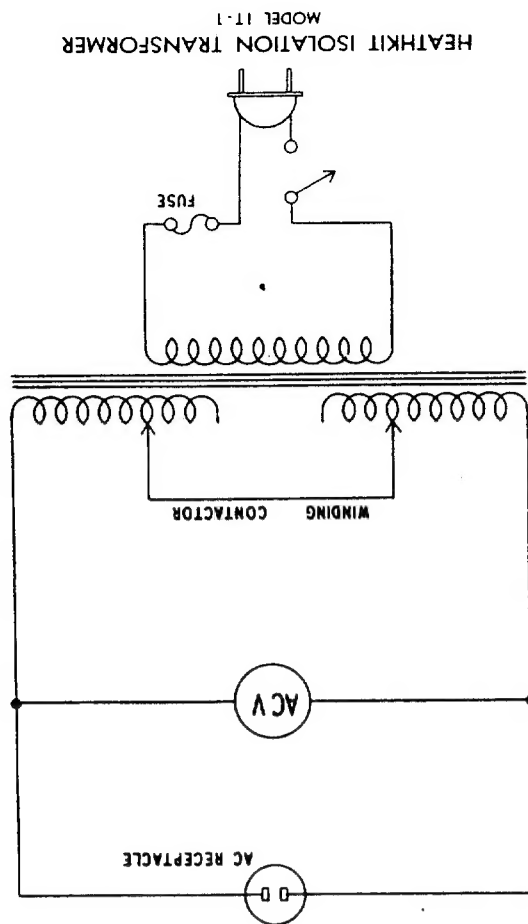
This sketch clearly shows the universal manner in which Heath binding posts will accommodate an alligator clip, banana plug, test lead pin, spade lug or wire.



To accommodate customer requests, a binding post kit is now available. The kit is sold only in units of twenty complete binding post assemblies; ten red and ten black insulator caps. Consists of binding post base, fluted cap, flat fiber washer, shoulder fiber washer solder lug and 6-32 nut; 120 pieces in all Shipping wt. 1 pound. (40c Dwn. 34c Mo.) Binding post kit #362-A at **\$4.00**

# HEATHKIT ISOLATION TRANSFORMER

MODEL IT-1



## APPLICATIONS

The Heathkit Isolation Transformer will fulfill a multitude of requirements in service shops. Not only will it provide isolation for universal or transformerless type radios and thereby eliminate shock hazard, it will also provide a means of increasing the AC voltage applied to the radio. In this manner, intermittent conditions of operation can be detected by applying higher than normal voltages and thereby inducing a breakdown in the component affected. While this does not necessarily represent the universal solution to intermittent operation difficulties, it will prove extremely helpful in eliminating some of the more common faults.

The line voltage applied to the radio can also be reduced, so that it can be determined whether or not intermittent operation is due to lower than average line voltage, thereby causing the oscillator to cease functioning at some critical voltage level. This is particularly true in three-way battery portable radios when operated from an AC supply source. The 1.4 filament voltage applied to the oscillator tube might drop to 1.3 or 1.2 and oscillation ceases, resulting in an inoperative or intermittent receiver.

It is possible that many other applications of the Isolation Transformer will suggest themselves to the user; i.e. it can be used to isolate interference radiating devices from the AC line thereby reducing interference level. It can also be used in checking fluorescent lamp starters by determining the voltage level required for operation. Small motors or appliances may have their operating characteristics altered through the use of a variable voltage isolation transformer. It is important that the power rating of the unit not be exceeded. The Heathkit IT-1 is rated at 100 volt amperes continuously, or up to 200 volt amperes intermittently.